

REMARKS

The present Amendment responds to the Office Action dated December 22, 2006. Concurrently filed is a petition for three-month extension of the period in which to respond to the Office Action.

Antecedent Basis For “Dough Transfer Device”

The examiner objected to the specification as failing to provide proper antecedent basis for the claimed “dough transfer device.” The specification is amended at page 9, line 19 to refer to “a dough transfer device.” This amendment is supported by the specification and the claims, particularly claim 1 that describes the dough transfer device having a conical-shaped bottom profile and including a scraper device, and consistently therewith, in the specification at page 9, lines 19 – 21 and page 10, lines 9 – 16.

Amendments Clarifying Claims

The examiner rejected claims 1 -10, 12, and 15-21 as being indefinite. The present amendment attends to the matters raised in independent claim 1:

“the inner side walls” (line 7) amended to “an inner side wall”

“the bottom” (line 9) amended to - -a bottom--.

The claim is clarified by deleting the phrases “for further processing steps to be carried out on the dough” and “as required when in use.”

Amended Specification

The specification is currently amended at page 1, lines 10 – 17 to provide a brief summary of the present invention commensurate with claim 1 and followed by a brief description of the drawings and a detailed description. In effect, the brief description of the drawings moves from pages 7 and 8 to page 1 following the brief summary.

Claims Patentably Distinct From Prior Art

Claims 1-10, 12, and 15-21 stand rejected under 35 USC 103(a) as being unpatentable over DE20014175 in view of IE 960202. The examiner contends generally that DE 20014175 discloses the structure of the claimed subject matter except for further mixing (over-mixing) of the dough or batter prior to cooking. The examiner then concludes it would have been obvious to avoid further mixing or over-mixing of the dough or batter in the manner suggested by IE 960202.

However, the examiner fails to cite to any particular structure in DE 20014175 or IE 960202.

DE 20014175, as acknowledged by the examiner, lacks structure that avoids further mixing or over-mixing of the dough: “...discloses the structure of the claimed subject matter except for further mixing (over-mixing) of the dough...” (sic), this statement of the examiner is understood to mean “except for reducing further mixing or overmixing.” Indeed, DE 20014175 fails to consider the problem of over-mixing. DE 20014175 relates to a mixing system for firm doughs, such as pizza-base dough. The present invention, however, is not directed to mixing batter, but to handling the dough post-mixing by a structure that does not add significantly to the mixing of the dough and thus reduces over-mixing of the dough.

DE 20014175 does not teach or suggest the claimed elements of a conical hopper with a scraper blade adapted to handle a batter with a downward discharge through the base of the hopper. The recited structure set forth in the claim provides a careful and gentle handling of mixed dough. DE 20014175 however only discloses a carousel mixer set up with 2 mixers with a bowl elevator for discharging batches of dough.

IE 960202 fails to teach or suggest a dough dispensing apparatus set forth in claim 1 (amended) for a structure in which a dough/batter is mixed and then transported about a factory in such a way that further mixing of the batter is avoided prior to the batter being cooked. IE 960202 discloses a process for preparing sponge-dough hamburger buns. The bread (sponge) dough made in this process is relatively dry. It is not a sticky-type dough batter, the handling of which causes particular difficulties as explained in the remarks filed with the October 16, 2006 amendment and incorporated herein by reference. There is no suggestion in IE 960202 of treating the dough to avoid further mixing of the dough; indeed, the dough goes through several mixing steps and a pumping step, using screws 34, 35 which send the dough to supply pipe 33. This substantial working of the dough is avoided by the structure of claim 1 (amended), thereby allowing the batter characteristics to be preserved up to the cooking stage.

In IE 960202, dough is initially mixed in a mixing machine 10 then transferred to a dough bin 12 for fermentation. Following fermentation, the still-unfinished sponge dough is moved to a second mixer 17, at which further ingredients are mixed into the dough. Transfer of the dough to the mixer 17 is effected by placing the dough bin 12 onto a carriage which vertically elevates and tips

the bin so that the dough falls into an inclined dough delivery chute 26, the outlet of which feeds the dough into mixer 17. Once the dough is finally mixed in mixer 17, it is discharged to a rectangular dough hopper 30. From the hopper, it is pumped upwardly through supply pipe 33 to a divider 32. This process is described at page 6, line 11 to page 8, line 2 and is best illustrated in Figures 3 and 4 of IE 960202.

It is only when the dough leaves mixer 17 that it is finished dough. It is at this point the apparatus of the present invention provides structure to very carefully handle the finished dough. IE 960202 however describes the dough being pumped upwardly. In contrast, the apparatus as claimed gently preserves the batter characteristics of the dough by containing the dough within a conical hopper and discharging it downwardly through a valve in the base of the conical hopper, with the assistance of the curved scraper blade which drives the dough downwardly toward the outlet at the cone of the conical hopper, assisted by the slow rotation of the hopper (see page 10, lines 25 to 29). This structure is neither taught nor suggested by IE 960202. Indeed Claim 1 calls for structure providing relative motion between the scraper blade and the dough.

Even if the teachings of DE 20014175 and IE 960202 were combined, the result would be upward pumping of dough out of the mixers of DE 20014175.

Claim 1 expressly recites an arcuate scraper device for the interior surface of a conical dough transfer device, and as discussed above, such structure is not taught or suggested in the prior art documents. As described at page 9 lines 4 to 6 and 14 to 15 of the application, the batter is mixed at

mixing stations which then supply the mixed batter to the containers (bowls 1,1'). The containers, once filled with the mixed batter, then move out of the mixing room on the track 14. Once this batter is initially mixed and prepared, it is important that it is handled thereafter with as little additional disturbance or further mixing as possible, as disclosed at page 10 lines 9 to 23 and 29 to page 11 line 3 of the application as originally filed. Applicants attempted different means of moving the prepared batter through the factory from mixing to cooking, including pumping the batter, but found that additional excess mixing occurred which effected the characteristics of the batter, resulting in uncontrolled and undesired variation in the final cooked product. It was found that it was necessary to retain the batter as undisturbed as possible after its initial controlled mixing and conditioning so that a final cooked product with the desired flavor and consistency could be achieved.

To facilitate this, the apparatus of the invention was developed and in particular, the insight was arrived at that the batter could be dispersed from the conical dough transfer device (hopper) with minimal disturbance by scraping the inside wall of the hopper with a scraper device. The gentle movement of the batter achieved in this manner is sufficient to prevent a build-up of batter on the wall of the hopper, which would eventually cake to the extent that the exit from the base of the hopper would become blocked. At the same time, this gentle movement of the batter is such that further working or mixing of the batter is substantially avoided. In particular, the arrangement is such that the scraper is located in the conical dough transfer device near its dispensing exit and is shaped as an arc to assist in taking a "slice" of batter and driving it downward in the conical area of the hopper to be dispensed through the bottom exit. The combined shapes of the arcuate scraper

acting in the conical portion of the dough transfer device provide a non-obvious, effective means for minimally handling batter while avoiding clogging of the exit.

For these reasons, it is respectfully urged that claims 1 – 10, 12, and 15 -21 are allowable, and same is earnestly solicited.

Request For Reconsideration Of Information Disclosure Statement

It is not clear to the undersigned why the IE 960202 reference was struck from the list of references cited Form PTO-1449 (modified) filed June 24, 2004, considered by the examiner dated December 20, 2006. Reconsideration of this decision is respectfully requested for listing IE 960202 as a reference considered during examination.

Drawings

The examiner asked review to ensure all reference characters in the drawings are described in the detailed description and all reference numerals in the specification are included in an appropriate drawing.

Figure 1 is amended to include reference numeral 4 and 5.

Reference numeral 701 at page 13, line 24 is deleted as not shown in the drawings, but see reference numeral 801 at page 13, line 26 and Figure 6a for a handle.

Election/Restrictions

It is noted that the examiner deems claims 22 – 34 and 37 – 42 as withdrawn, as “there being no generic or linking claim”.

The applicant respectfully requests reconsideration. As explained on pages 17 and 18 of the amendment filed October 16, 2006 and incorporated herein by reference, the structural elements of the subject matter of claims 1 – 10, 12, and 15 – 21 are the same as for the system of claims 22 – 34 and 37 – 40 that express the subject matter of the invention in structural / functional terms.

Summary

For the foregoing reasons, it is believed that claims 1 – 10, 12, and 15 – 21 as amended are in condition for allowance, and same is earnestly solicited. As noted above, the examiner is invited to revisit claims 22 – 34 and 37 – 40 for allowed as well.

Respectfully submitted,

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